

**Bonneville Power AdministrationPower Administration  
Fish and Wildlife Program FY99 Proposal**

**Section 1. General administrative information**

**Restore the Salmon River, in the Challis, Idaho area, to a healthy condition through the efforts of a collaborative, locally-based, watershed group**

**Bonneville project number, if an ongoing project** 9009

**Business name of agency, institution or organization requesting funding**  
Custer County Watershed Group

**Business acronym (if appropriate)** \_\_\_\_\_

**Proposal contact person or principal investigator:**

|                 |                             |
|-----------------|-----------------------------|
| Name            | <u>Mark Olson</u>           |
| Mailing Address | <u>Box 305</u>              |
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| Phone           | <u>208-879-4428</u>         |
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| Email address   | _____                       |

**Subcontractors.**

| Organization | Mailing Address | City, ST Zip | Contact Name |
|--------------|-----------------|--------------|--------------|
| NA           |                 |              |              |
|              |                 |              |              |
|              |                 |              |              |

**NPPC Program Measure Number(s) which this project addresses.**

7.6A, 7.6B, 7.6C, 7.6D, 7.7A, 7.8A

**NMFS Biological Opinion Number(s) which this project addresses.**

Listed as critical habitat for chinook, steelhead, wolves, bald eagles, peregrine falcons, and ute ladies >-tressess.

**Other planning document references.**

Snake River Salmon Recovery Plan Task No.s 1.4b, 1.4c, 1.4d

## Subbasin.

Upper Salmon River Basin

## Short description.

**Restore river corridor to a healthy condition by reestablishing riparian vegetation and allowing the floodplain to become functional. Social and political factors are being addressed through a county-based watershed group.**

## Section 2. Key words

| Mark | Programmatic Categories | Mark | Activities       | Mark | Project Types         |
|------|-------------------------|------|------------------|------|-----------------------|
| X    | Anadromous fish         | X    | Construction     | X    | Watershed             |
| *    | Resident fish           | *    | O & M            |      | Biodiversity/genetics |
| *    | Wildlife                |      | Production       |      | Population dynamics   |
|      | Oceans/estuaries        |      | Research         | *    | Ecosystems            |
|      | Climate                 |      | Monitoring/eval. | *    | Flow/survival         |
|      | Other                   | *    | Resource mgmt    |      | Fish disease          |
|      |                         |      | Planning/admin.  |      | Supplementation       |
|      |                         |      | Enforcement      | *    | Wildlife habitat en-  |
|      |                         |      | Acquisitions     |      | hancement/restoration |

## Other keywords.

**Riparian Function, Sediment Reduction, Chinook Salmon and Steelhead Spawning Habitat**

## Section 3. Relationships to other Bonneville projects

| Project # | Project title/description | Nature of relationship |
|-----------|---------------------------|------------------------|
| NA        |                           |                        |
|           |                           |                        |
|           |                           |                        |

## Section 4. Objectives, tasks and schedules

| Obj 1,2,3 | Objective  | Task a,b,c | Task   |
|-----------|--|------------|--|
| 1         | Restore natural functioning river corridor along a 12 mile reach of the Salmon River | a          | Develop plans and agreements with individual landowners to reestablish and maintain a healthy vegetative community in the riparian area. |
| 1         |  | b          | Remove or lower dikes to allow floods to access floodplain   |

|   |  |   |  |
|---|--|---|--|
| 1 |  | c | Limited use of barbs and large rock to control severe bank erosion |
|   |  |   |  |
|   |  |   |  |
|   |  |   |  |

**Objective schedules and costs**

| Objective # | Start Date<br>mm/yyyy | End Date<br>mm/yyyy | Cost % |
|-------------|-----------------------|---------------------|--------|
| 1           | 10/1998               | 09/2003             | 100    |
|             |                       |                     |        |
|             |                       |                     |        |
|             |                       |                     |        |

**Schedule constraints.**

**Completion date.**

2003

**Section 5. Budget**

| Item  | Note  | FY99   |
|---|---|--------|
| Personnel   |   |        |
| Fringe benefits   |   |        |
| Supplies, materials, non-expendable property                              | First year efforts will be focused at stabilizing actively eroding river banks. Subsequent years will include fencing, riparian plantings, and dike lowering. | 95000  |
| Operations & maintenance  |   |        |
| Capital acquisitions or improvements (e.g. land, buildings, major equip.) |   |        |
| PIT tags  | # of tags:  |        |
| Travel  |   |        |
| Indirect costs  | Administrative costs Custer Co.SWCD @ 5%.   | 5000   |
| Subcontracts  |   |        |
| Other   |   |        |
| <b>TOTAL</b>  |   | 100000 |

**Outyear costs**

| Outyear costs | FY2000 | FY01 | FY02 | FY03 |
|---------------|--------|------|------|------|
|---------------|--------|------|------|------|

|                   |       |       |       |       |
|-------------------|-------|-------|-------|-------|
| Total budget      | 50000 | 50000 | 25000 | 25000 |
| O&M as % of total |       |       |       |       |

## Section 6. Abstract

Twelve miles of the Salmon River have been straightened, diked, and show the effects of poor vegetation management. The result is a continuing loss of private land and degrading fisheries habitat. To correct the problem an overview plan was developed by Forest Service hydrologists and soil scientists working with NRCS and IDFG biologists to take a wholistic approach for restoring the entire river reach. The plan basically calls for restoring a healthy riparian corridor along the river and restoring the natural floodplain. A county watershed group was formed with representation from all interested parties. This is a collaborative effort, with cost share funding from NRCS, IDFG, USFWS, USFS, BLM, BoR, US Army Corp of Engineers and possibly grants from private organizations. Funding will be administered by the Custer Soil and Water Conservation District. Private landowners will cost-share their portion by reserving land within the corridor, providing labor to manage livestock, and being responsible for long-term maintenance of fences, vegetation, and construction works..

## Section 7. Project description

### a. Technical and/or scientific background.

This 12 mile section of the Salmon River is located in central Idaho, near the town of Challis. The river upstream of this area is naturally confined within a canyon. Near Challis the river enters an agricultural valley, where straightening, diking, and vegetation management have contributed to an increasingly unstable river system. Many of the natural features that would dissipate energy of floodwaters are no longer present. Severe river bank erosion is occurring in this area. Fisheries habitat is declining due to loss of pools and an unstable bedload composed primarily of large cobble. Salmon and steelhead spawning no longer occurs in this reach, although historically the area was used (IDFG 1966-1979). Anadromous and resident fish stocks still use this area as a migration corridor and for rearing. Spring/summer chinook were listed under the Endangered Species Act as threatened on April 22, 1992 (57 FR 42529), and the Salmon River is classified as critical habitat (57 FR 14653).

After several meetings with concerned landowners, agencies, and congressional staff, it was decided the best approach was to form a watershed group that could develop a plan for restoring the entire river section, rather than the past attempts of treating one problem at a time. Custer County developed a Memorandum of Agreement, that designates a watershed group to coordinate the river restoration planning. The Forest Service contributed two hydrologists/soil scientists to draft an overview plan (Machado and Gallogly, draft 1997) for the entire river section. The watershed group will now coordinate with individual

landowners on the specific site plans for their property.

In accordance with the Fish and Wildlife program goals (NPPC 1994), this project will protect and improve fish and wildlife habitat conditions in and along the Salmon River. Using a collaborative watershed process involving federal, tribal, state, county, and private landowners, this project will provide for cooperative habitat protection, primarily on private lands. However this project will also address inclusive federal lands as called for in the Final Snake River Salmon Recovery Plan (NMFS, in review).

**b. Proposal objectives.**

1. Restore a natural functioning river corridor along a 12 mile reach of the Salmon River. Overview plan addresses the wholistic needs for the entire river reach and the associated floodplain. Site specific plans with individual landowners address the vegetative retraction needs for long-term natural stability of the system. Removing and/or lower dikes will allow the river to access it=s natural floodplain. A limited use of rock and tree revetments will be used to control severe bank erosion until vegetation becomes established. Reducing bank erosion and bedload movement to a natural level, while reestablishing a healthy vegetative corridor will restore fisheries habitat and greatly reduce the loss of valuable agricultural lands.

**c. Rationale and significance to Regional Programs.**

The Columbia River Basin Fish and Wildlife Program recognizes that improvements in habitat quality are needed to increase the productivity of many stocks of chinook salmon (NPPC 1994). This project is similar in nature to Model Watershed Projects being completed in the adjoining East Fork Salmon River and Pahsimeroi River, which are tributaries to the Salmon River above and below this project area (Model Watershed Plan 1994).

Several measures in the Fish and Wildlife Program (NPPC 1994) are being addressed with this project: 7.6A.1 calls for a comprehensive approach, which we intend to use, 7.6A.2 calls for improving the productivity of salmon and steelhead habitat critical to the recover of weak stocks. Habitat Policies 7.6B.1,2,3,4,5,& 6 are being addressed within the watershed group approach with a proactive, cooperative program, coordinated with state and federal stream alteration permits, over a broader wholistic plan with private landowners to maximize the desired result per dollar spent, with cost-sharing among several agencies and individual landowners all contributing in some way. Educational efforts are being coordinated through the watershed group and the local Soil and Water Conservation District within the community. Coordinated Habitat Planning (7.6C) is being accomplished through and integrated approach across many jurisdictional and ownership boundaries. In this case public and private landowners are acting in concert to restore a healthy river.

**d. Project history**

**Not applicable, this is a new project.**

**e. Methods.**

**River restoration techniques will be geared towards reestablishing a natural functioning system, focused primarily on vegetative management over the entire river corridor and its associated floodplain. Natural Resource Conservation Service guidelines will be used for vegetative reestablishment, livestock fencing, and engineering services for rock and tree revetment structures. All stream alteration permits will be reviewed and commented on by Idaho Dept. of Water Resources, US Army Corp of Engineers, Idaho Dept of Fish and Game, Bureau of Land Management, Shoshone Bannock Tribe, Idaho Dept of Lands, and National Marine Fisheries Service personnel to ensure adequate peer review for all proposed projects within the river corridor and associated wetlands .**

**Project monitoring and evaluation will be coordinated through the Custer County Watershed Group. Aerial and site specific photographs will be used to document changes over time. IDFG will conduct fisheries and habitat surveys within the project reach. NRCS will monitor livestock grazing patterns along the river corridor and the associated floodplain. BLM will monitor habitat conditions on their lands within the project area.**

**We expect to see drastically reduced bank erosion within the five year project period. We expect the river bedload movement patterns to be significantly reduced and many of the now bare gravel point bars will begin revegetating. We expect willows and cottonwoods will begin regeneration on river banks that now have only limited numbers of old trees. We expect floodplain areas that now are heavily infested with exotic weeds to become reestablished with productive grasses over a ten to fifteen year period. We expect the natural beauty of the area to improve. We expect the water quality to improve, and we expect the fishery to improve. We also expect that landowners will take more pride in their land and reestablish trust in working with agency personnel on environmental issues.**

**f. Facilities and equipment.**

**Natural Resource Conservation Service and Custer Soil and Water Conservation District personnel will provide the locally-based facilities to coordinate planning and landowner services. Custer County Watershed Group will provide guidance for project implementation, monitoring, and evaluation. Private contractors will be used as needed for heavy equipment for rock and tree revetments. Individual landowners will provide labor and small tools for project maintenance. Aerial photography will be contracted out to private entities.**

**g. References.**

**Northwest Power Planning Council. 1994. Columbia River Basin Fish and Wildlife Program. Northwest Power Planning Council, Portland, Oregon.**

**U.S. Government, Federal Register. (57 FR 14653). Listing of Snake River fall chinook and Salmon River spring/summer chinook as threatened. April 22, 1992. Washington, D.C., 57:14653.**

**\_\_\_\_\_. (59 FR 42529). Reclassification of Snake River fall chinook and Salmon River spring/summer chinook as endangered. August 18, 1994. Washington, D. C., 59:42529.**

**U. S. Department of Commerce (USDC). National Oceanic and Atmospheric Administration (NOAA). National Marine Fisheries Service (NMFS). In Review. Final Recovery Plan for Snake River Salmon.**

## **Section 8. Relationships to other projects**

**Model Watershed projects in the Lemhi, Pahsimeroi, and East Fork Salmon River, are similar in nature to the work we intend to do on the mainstem Salmon River. Because the Model Watershed Advisory Committee restricts itself to these three sub-basins, it was not feasible to coordinate this project through that program.**

**Stream Alteration Permits will be required for this project. As stated above all applicable agencies will review and comment on these permits. The entire project reach will be submitted under one permit, with individual landowners still maintaining responsibility for their own activities.**

**Consultation with NMFS and USFWS will occur on all listed species.**

**All agencies will be represented on the Custer County Watershed Group and will be included on the Custer County Memorandum of Agreement, which also intends to address other riparian concerns throughout the county.**

## **Section 9. Key personnel**

**This will be a collaborative effort utilizing all the expertise available within the Custer County Watershed Group. Membership includes the following: Mark Olson, NRCS, project coordinator, soil conservationist; Mike Larkin, IDFG, regional fisheries manager; Melodie Baker, Custer County Commissioner; Lenore Barrett, Representative Idaho Legislature; Dale Gooby, NRCS, civil engineer; Carolyn Hubble, Thompson Creek Mining Co., public relations; Karma Bragg, CSWCD, administrative assistant; Barbara Machado, USFS, hydrologist; Karen Gallogly, USFS, soil scientist/hydrologist; Jeff Anderson, Shoshone-Bannock Tribe, fisheries biologist; Renee Snyder, BLM, Challis Area Resource Manager; Kate Forester, BLM, fisheries biologist; Bill Alder, landowner; Bill Savage, landowner, Clive Dunfee, landowner; Ray Kagel, US Army Corp of Engineers, environmental resource specialist; Bob Ries, NMFS, fisheries biologist; Mike Donahoo, USFWS, field supervisor; Terry Blau, IDWR, stream protection specialist; plus other professional personnel from local agencies as needed.**

## **Section 10. Information/technology transfer**

**Custer County Watershed Group will hold public meetings and use local media to keep landowners and the interested parties informed of project progress. The Watershed Group will also conduct tours of successful projects as they are completed. Custer SWCD=s information and education program will highlight projects through newsletters and displays within the community. Other agencies cooperating with the project will each use their I&E sections to inform interested publics of the project benefits and values.**